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Managing Water in the West

Central Valley Project Cost Allocation Study Update

Public Meeting
June 29, 2012



U.S. Department of the Interior
Bureau of Reclamation

CVP-CAS

*Central Valley Project
Cost Allocation Study*

Meeting Purpose

- Review Assumptions Developed to Date
- Overview of Analysis Approach



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CVP-CAS *Central Valley Project Cost Allocation Study*

Background

- Last Meeting on 3/16/12
 - Reviewed Flood Control Methodology
 - Introduced Re-Pricing Methodology
 - Feedback



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Summary of Feedback Received

- Tracking System - Decisions Made to Date/Actions Completed
- Methodology - Better Understanding of Overall Approach
- CVP Facilities - Focus on Multi-purpose Facilities

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CVP-CAS *Analysis Approach*

Draft Assumptions

- Methodology
- Period of Analysis
- Benefits Analysis
- Cost Estimating
- Allocation Application
- Interest Rate
- Facilities Included

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CVP-CAS *Central Valley Project Cost Allocation Study*

Overview of Analysis Approach

- Benefit Evaluation
- Define Single Purpose Alternatives (SPA)
- Facilities Included
- Estimating SPA Costs
- Responsible Staff and Schedule

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CVP-CAS – Analysis Approach

Flood Control

- Benefits Damages Prevented Analysis
- SPA Dam and reservoir at existing CVP facility sites
- Sizing USACE Rule Curve Method
- Facilities Shasta, Trinity, Clear Creek Tunnel, Whiskeytown, Spring Creek Dam/Reservoir, Folsom, Nimbus Dam/Lake Natoma, New Melones and Friant
- Cost Estimating Cost curve model to re-price SPA
- Team Lead(s) USACE, Denver TSC, MP Design & Construction

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CVP-CAS – Analysis Approach

Flood Control

Facility Sizing (TAF)	CVP Facilities				
	Trinity	Shasta	Folsom	New Melones	Friant
Existing Storage Capacity	2447	4552	972	2420	524
SPA - Rule Curve Method	837	1852	757	530	308.5
SPA - Daily Hydrology Method	612	1967	572	477	1046

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CVP-CAS – Analysis Approach

Navigation

- Benefits Benefit values no longer calculated by USACE, values generated for 1988 cost allocation effort
- SPA Not applicable (benefit value would be used)
- Sizing Not applicable
- Facilities Shasta, if applicable
- Cost Estimating Not applicable
- Team Lead(s) USACE, MP Ratesetting

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CVP-CAS – Analysis Approach

Recreation

- Benefits Based on historical recreation visitation, reservoir water levels, & market area populations
- SPA Not applicable (benefit value would be used)
- Sizing Dam sized to provide water levels sufficient to maintain current visitation
- Facilities New Melones, Los Banos Detention Dam
- Cost Estimating Not applicable
- Team Lead(s) Denver TSC, MP Design & Construction

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CVP-CAS – Analysis Approach

Power

- Benefits
 - Benefits measured on national/regional scale as value of CVP hydropower to the electric grid
 - Power benefits are constrained by actual water operations
 - Power (energy, capacity and ancillary services) valued using avoided cost approach
 - Use of PLEXOS model (transmission constrained production cost model)
- SPA Hydropower facilities in current multipurpose facility locations

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CVP-CAS – Analysis Approach

Power

- Sizing
 - Dam, reservoir, power plant system providing comparable power benefits to existing CVP power features
 - Include on-peak, off-peak and ancillary service benefits
 - Capacity benefits estimated using a dry year analysis
- Facilities Shasta, Trinity, Spring Creek, Whiskeytown (Judge Francis Carr), Folsom, Nimbus, New Melones
- Cost Estimating Cost curve model to re-price SPA
- Team Lead(s) MP Planning, Western Area Power Administration

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CVP-CAS – Analysis Approach

Water Supply

- Benefits Irrigation/Agriculture, Municipal & Industrial, Wildlife Refuge
- SPA Dam and reservoir
- Sizing
 - Based on water deliveries
 - Model constructed to generate fixed deliveries under current regulatory environment (including physical constraints and fixed operations of the SWP)
 - Determine reservoir sizes required to facilitate deliveries

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CVP-CAS – Analysis Approach

Water Supply

- Facilities Shasta, Trinity, Clear Creek Tunnel, Whiskeytown Dam & Lake, Spring Creek Dam & Reservoir, Folsom, Nimbus Dam & Lake Natoma, New Melones, Los Banos Detention Dam, Friant, Tehama-Colusa Canal
- Cost Estimating Cost curve model to re-price SPA
- Team Lead(s) Denver TSC, MP Design & Construction

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CVP-CAS – Analysis Approach

Water Quality

- Benefits Increased flows in the Stanislaus River to improve fisheries habitat and water quality
- SPA Dam and reservoir
- Sizing Determine reservoir size required to facilitate water deliveries for water quality
- Facilities New Melones
- Cost Estimating Cost curve model to re-price SPA
- Team Lead(s) MP Ratesetting, MP Planning, Denver TSC

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CVP-CAS – Analysis Approach

Fish and Wildlife

- Benefits
 - Single purpose fish hatcheries/protection facilities/restoration programs - **Nonreimbursable**
 - CVP fish and wildlife mitigation - **Reimbursable**
 - Reclamation to continue pursuing FWS coordination opportunities
- SPA & Sizing TBD
- Facilities Whiskeytown, Spring Creek, New Melones, Tehama-Colusa Canal
- Cost Estimating TBD
- Team Lead(s) Fish and Wildlife Service, MP Planning & Ratesetting

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CVP-CAS – Facility and Analysis Summary

Facility	CVP Authorized Purposes						
	Flood Control	Navigation	Water Supply	Power	Fish & Wildlife	Recreation	Water Quality
Shasta	X	X	X	X			
Trinity	X		X	X			
Clear Creek Tunnel	X		X	X			
Whiskeytown Dam	X		X	X	X		
Spring Creek Dam				X	X		
Folsom	X		X	X			
Nimbus Dam/L. Natoma	X		X	X			
Los Banos Creek Dam	X		X			X	
Friant	X		X				
New Melones*	X		X	X	X	X	X
Tehama-Colusa Canal			X		X		

* Pending determination on eligibility for Reclamation cost allocation update

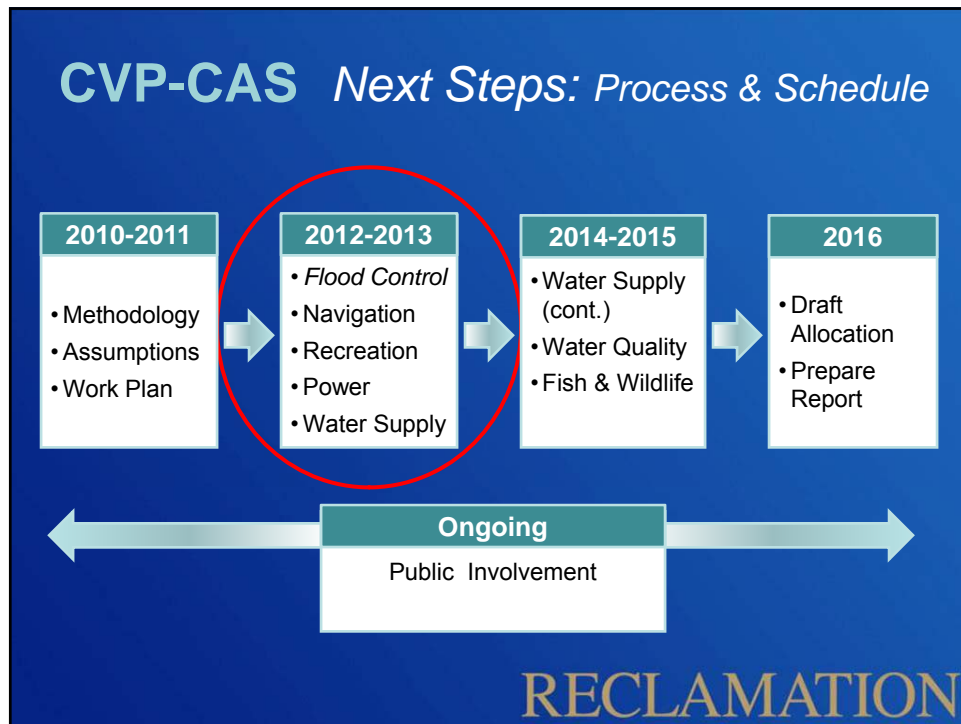
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CVP-CAS Next Steps

- Review and Respond to Comments Received
- Refinement of Process and Schedule
- Upcoming Public Meetings
 - September 21, 2012
 - December 14, 2012



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www.usbr.gov/mp/cvp/cvp-cas/index.html

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